

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : (To Be Assigned) Confirmation No. : TBA  
PCT/EP2004/052774  
First Named Inventor : Karl-Ernst HUMMEL  
Filed : May 4, 2006  
TC/A.U. : (To Be Assigned)  
Examiner : (To Be Assigned)  
Docket No. : 037141.57706US  
Customer No. : 23911  
Title : Non-Positive-Displacement Machine Comprising a Spiral  
Channel Provided in the Housing Middle Part

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §§ 1.97 AND 1.98**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, the attached Form PTO-1449 lists documents which the Examiner may deem relevant to patentability of the claims of the above-identified application.

**I. Time Period of Submission**

This Information Disclosure Statement is submitted:

☒ 1) no later than three months from the application's filing date or 2) before the mailing date of the first Office Action on the merits (whichever is later) or 3) before a first Office Action after the filing of a Request for Continued Examination, and therefore no statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

☐ 2) after the later of three months from the application's filing date and the mailing date of the first Office Action on the merits, but before a Final Office Action, a Notice of Allowance, or an action closing prosecution (*Ex parte Quayle*), (whichever is earlier), and therefore Applicant is filing concurrently herewith:

☐ a Statement under 37 C.F.R. § 1.97(e); or

☐ a fee in the amount of \$180.00 under 37 C.F.R. § 1.17(p).

☐ 3) after either a Final Office Action or a Notice of Allowance, but before payment of the Issue Fee, and therefore Applicant is submitting herewith:

a Statement under 37 C.F.R. § 1.97(e); and

a fee in the amount of \$180.00 under 37 C.F.R. § 1.17(p).

II. Statement Under 37 C.F.R. § 1.97(e)

☐ I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or

☐ I hereby state that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making a reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement; or

III. Statement under 37 C.F.R. § 1.704(d)

☐ I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this Information Disclosure Statement.

IV. Submission of Non-English Language Documents

☒ The following is a concise explanation of relevance of the non-English language documents listed in the attached Form PTO-1449:

☐ The relevance of document(s) \_\_\_\_\_ to the subject matter of the present invention is/are provided in the specification of the above-identified application.

☒ Corresponding foreign or international report(s) citing document(s) AE, together with an English-language version(s) (if not already in English) of that portion of the report(s) indicating the degree of relevance found by the foreign office(s) is/are submitted.

☐ English language family member publication(s) of document(s) \_\_\_\_\_ is/are noted on Form PTO-1449.

☐ English language abstract(s) is/are submitted for document(s) \_\_\_\_\_.

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PATENT

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☐ English translation(s) of the foreign language document(s)  
\_\_\_\_\_ is/are submitted herewith.

☐ Applicant submits the following explanations:  
\_\_\_\_\_.

V. Continuations/Divisionals


☐ Documents \_\_\_\_\_ were of record in parent application Serial No. \_\_\_\_\_, filed \_\_\_\_\_, from which this application claims benefit. As provided in 37 C.F.R. §1.98(d), copies of the documents are not being provided since they were previously submitted to or cited by the United States Patent and Trademark Office in the afore-mentioned parent application.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

If necessary, this paper should be considered as an authorization to charge Deposit Account 05-1323, Attorney Docket No.: 037141.57706US, for the fee set forth in 37 C.F.R. § 1.17(p).

Respectfully submitted,

May 4, 2006

  
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Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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| Substitute for form 1449A/PTO<br><br><b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br><i>(use as many sheets as necessary)</i> |                  |    | <b>Complete if Known</b> |                                      |                |
|   |                  |    | Application Number       | (To Be Assigned) (PCT/EP2004/052774) |                |
|   |                  |    | Filing Date              | May 4, 2006                          |                |
|   |                  |    | First Named Inventor     | Karl-Ernst HUMMEL                    |                |
|   |                  |    | Art Unit                 | (To Be Assigned)                     |                |
| Examiner Name   | (To Be Assigned) |    |                          |                                      |                |
| Sheet   | 1                | of | 1                        | Attorney Docket Number               | 037141.57706US |

| U.S. PATENT DOCUMENTS |                       |  |   |                                |  |   |
|-----------------------|-----------------------|--|---|--------------------------------|--|---|
| Examiner Initials'    | Cite No. <sup>1</sup> | Document Number                          |   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|                       |                       | Number-Kind Code <sup>2</sup> (if known) |   |                                |  |   |
|                       | AA                    | US- 4,598,542                            |   | 07/08/1986                     | Reynolds   |   |
|                       | AB                    | US- 4,009,568                            |   | 03/01/1977                     | King et al.  |   |
|                       | AC                    | US- 3,844,676                            |   | 10/29/1974                     | Betteridge   |   |
|                       | AD                    | US- 6,145,846                            | A | 11/14/2000                     | Slack et al.                                       |   |
|                       | AE                    | US- 5,951,019                            | A | 09/14/1999                     | Slack et. al.                                      | Corresponds to AD   |
|                       |                       | US-                                      |   |                                |  |   |
|                       |                       | US-                                      |   |                                |  |   |

| FOREIGN PATENT DOCUMENTS |                          |   |                                |  |   |                |
|--------------------------|--------------------------|---|--------------------------------|--|---|----------------|
| Examiner<br>Initials'    | Cite<br>No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>or Relevant Figures Appear | T <sup>6</sup> |
|                          |                          | Country Code <sup>3</sup> —Number <sup>4</sup> —Kind Code <sup>5</sup> (if known) |                                |  |   |                |
|                          | AF                       | EP 1 394 366 A1   | 03/03/2004                     | BorgWarner Inc.                                    |   |                |
|                          | AG                       | GB 1 315 307  | 05/02/1973                     | C.A.V. Limited                                     |   |                |
|                          |                          |   |                                |  |   |                |
|                          |                          |   |                                |  |   |                |
|                          |                          |   |                                |  |   |                |
|                          |                          |   |                                |  |   |                |

| NON PATENT LITERATURE DOCUMENTS |                       |   |                |
|---------------------------------|-----------------------|---|----------------|
| Examiner Initials <sup>1</sup>  | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|                                 | AH                    | International Search Report dated March 8, 2005 (Six (6) pages).  |                |

|                    |  |                 |  |
|--------------------|--|-----------------|--|
| Examiner Signature |  | Date Considered |  |
|--------------------|--|-----------------|--|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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